

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: John Tankersley <jtank@execpc.com>
Subject: [17840] 38 Frequency Problem
Message-ID: <Pine.GS0.3.95.970420073743.23008B-100000@earth>

Hello,

My name is John Tankersley. I just finished building the "38 Special" and am having a strange problem with the unit. I tested all the voltages on the board on transmit and receive and they check out alright. I am also getting a sidetone on keying. What is strange is that using a signal generator it was determined that the output frequency is in the 30Mhz + range. Well, what did I do wrong? I checked carefully all the components against the sheet and they test out. I am sure I wound the toroids properly. Could this be a harmonic? Well, if anyone can give me any help I would appreciate it. This is the first qrp unit that I have built that has worked.

Thank-you,

John Tankersley

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: jim hale <kj5tf@mctc.com>
Subject: [17877] 38s - Its Really Fried 510
Message-ID: <335A8E00.3A5B@mctc.com>

I built my second 38s kit & 5w mod just like my 1st and very successfull kit but when I key up, the majik smoke excapes! I've fried two IRF510's and double checked, twice! Oh well, I'll get two more at the Shack and try again, I guess

I could have gotten two bad ones in a row, right?

If thats not the problem, any ideas? de Jim

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [17862] 38S thump from 7808
Message-ID: <Roam.SIMC.2.0.4.861559975.9280.myers@bigboy>

While I don't have a 38S, it sounds like the 7808 has inadequate filtering on the input and output. Try putting a 10uF tantalum cap on the input and output and see if the thump goes away. Place the capacitors directly at the regulator, perhaps soldered to the underside of the PCB with very short leads.

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: JFKluender@aol.com
Subject: [17863] 38S Tuning Range
Message-ID: <970420145722_1520017399@emout03.mail.aol.com>

Greetings all,

I am new on this list as of today, and already I have a question - one that probably has been asked before but I'd appreciate help in any case.

I just completed building the "stock" version of the 38S - no mods yet. All the diagnostic checks look good. I can tune both the receive and transmit sections very cleanly and the signal sounds good. But the tuning range is a bit lower than I had expected - 10.097-10.121. Not a bad range, but a bit low for comfort, since I'd like to know that I am always within band.

Any suggestions how to easily shift the range a few kc? Maybe play with the 1N4004? Different inductor? I'm sure there are any number of ways to tweak the thing, but someone out there has probably already tried them and figured out the best, most stable way.

Thanks,

73,
Joel Kluender NF9K

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: gsurrency@juno.com
Subject: [17837] 38S, More findings on thumps and chirps
Message-ID: <19970419.232224.10134.7.gsurrency@juno.com>

Ok gang, here's some more stuff to ponder / try with your 38 Special:

I found a LF353 Bi-Fet op amp in my junk box. I tried it in place of the NE5532 supplied with the kit, and it seems to work very well. The interesting thing is, even without the Fet audio mute switch installed between U2 and U5 as described by me and others, very little thump is detectable! The NE5532 just seems to be MUCH more susceptible to noise or transients coming from U3 and/or U2.

I can't remember where or when I obtained the LF353, but it could have been in a IC grab bag or perhaps Radio Shack used to stock them years

ago. I don't think R/S has them now. If you have one of these op amps, try it and perhaps you will see what I noticed. During a QSO this evening with a local ham, N7XN, it worked just fine. Listening across the band later, I thought the sensitivity was at least as good as the NE5532. There is a Phillips NE5532 in an old computer monitor I have in the garage, and I want to pull it out and substitute it in the 38S to see if it thumps as bad as the JRC5532 that came in the kit. I'll post the results when I try it.

I also had some LM358AN op amps, and gave a couple of them a try in the 38S.

The results were disappointing. The LM358AN seemed to go into saturation very easily with strong audio signals from either the TiCK sidetone or receiver signals. Noticeable distortion was present, and lower audio levels as well. So it is NOT a workable sub for the NE5532, at least without making some other circuit changes. The LM358AN is an "electrically improved" version of the plain-jane LM358, whatever that means, but it just didn't work.

Another area of the 38S I wasn't satisfied with, was the slow chirp on the transmitted signal. It isn't very pronounced, and most stations don't comment on it, but it can be heard on another rig tuned to the 38S's signal. It may only be a few Hz or tens of Hz, but it is there. The duration must only be a few hundred milliseconds, if that much.

Well, here is my theory / fix for it:

On transmit, capacitor C21, a 47 pf disc on the bottom end of crystal X3 is shunted to ground by the T- signal on D6. I first thought there wasn't enough forward current through D6 when turned on by the keyed T- signal. I measured the voltage at the cathode end of D6 when keying with my keyboard keyer, and it was only 15-20 mv. Using the contacts of my Bencher BY-1 to key the rig to eliminate any voltage above ground at D6's cathode did not eliminate the chirp. That kinda makes sense, because the TiCK keyer I have installed in the kit pulls the keyed line low with a 2N2222 that is turned on "hard", with very little VsatON voltage. It was even lower than the keyboard would pull it to ground.

Ok, so nothing gained there. Think, think, think.....

Aha! The keyed PCB trace is VERY long from D6's cathode to pins 1 and 13 of U4, the collector of TR201- the 2N2222 TiCK keying transistor, and wiring pad 9 - the straight key input. I suspected this long path to ground did not play well for a low RF ground for D6 and the 47 pf capacitor C21. There must be some stray RF and/or inductance/capacitance in this long trace causing some instability and settling of the transmit frequency when first keyed. There is a 0.1 uf cap on the T- line at C30, but it is clear across the width of the PCB.

So I placed a 0.1 uf axial monolythic cap from the same PC pad hole of D6's cathode to a nearby unused ground foil via. If you look at the PCB, you will see the one I am referring to. It is the one closet to D6's cathode, and just above the silk screen date 1996. It is rather easy to remove enough solder from the PC pad hole for D6's cathode, and place the required bypass cap across to the ground via hole. A small radial lead 0.1 uf disc would also work, but I prefer the miniature axial monolythic type, since it keeps in style with the rest of the 0.1 uf caps already supplied with the kit. Use whatever you have.

I had tried replacing D6, the 1N914 diode, thinking it might be "soft" or defective. Of course it was OK, and rather than soldering it in at first, I just formed the leads of the substitute diode sufficiently to make electrical contact. When this idea did not eliminate the chirp, I already had a "clean" hole to share with one lead of the 0.1 uf mono cap I had just thought of trying.

Another trick I had tried when troubleshooting the chirp, was to decrease the value of R9, a 10K resistor that biases D6 "on" when transmitting. Although that did not work, it DID cause the transmitted frequency to shift somewhat because of the increased current through D6 when it is "on". I had just bridged another 10K resistor across R9, lowering the effective resistance to 5K in parallel and doubling the current thru D6 and probably changing the junction capacitance or pulling the top of C21 "harder" to ground.

I am not sure what effect this bypass cap might have on the source of the thump as someone else pointed out. Was that pointed out by Mike Gipe? Anyway, it is possible that a small cap on the cathode of D6 might reduce the rate that the voltage on D6's cathode and anode rise during key-up, thereby reducing the development of a thump in U3 through the offset circuit made up of C21, D6, and R9. I didn't think about this when I made the chirp fix. Perhaps someone or I will experiment with larger values of capacitance to see if the thump can be reduced this way.

While the addition of a RF bypass capacitor to the cathode end of D6 eliminated the small chirp at the beginning of each keydown, I was not satisfied with the transmit / receive offset. So I removed C21, a 47 pf disc cap, and started substituting different values of capacitors to experimentally determine the correct size. I tuned my ARK30 to zero beat of the 38S transmitted signal, and then listened to the 38S for zero beat during receive while transmitting with the ARK30. I could then shift the oscillation frequency of X3 by placing different values of capacitance at C21's PC pads. A miniature trimmer could be used here, either alone or in parallel with the existing 47 pf of C21 as originally supplied.

I found I had to go all the way to 100 pf to obtain the required

frequency shift during receive on the 38S. This was confirmed by the exact same audio tone on either rig, when tuning away from zero beat on either rig to a desired audio beat tone. Perhaps my ARK30 has a BFO setting or offset that is pretty high from the received signal frequency, and you may find you need less (or more?) capacitance to get your offset as you like it. I happened to have another tiny axial mono cap of 100 pf that fit nicely where the 47 pf disc used to. Several other larger silver mica caps proved the 100 pf value was correct, but I elected to use the axial mono cap for the same aesthetic reasons as before with the added 0.1 uf bypass on D6.

The addition of the RF bypass cap on D6 was partially responsible for the required change in C21's value to get the offset correct, but it wasn't quite right before the mod was made, either. So do the bypass mod on D6 first, and then determine the change in C21's value, if needed.

The results of these two mods have made the little radio much nicer to operate, and I hope these suggestions prove useful to those of you who try it. No traces need to be cut (I detest cutting traces!), and the changes can be easily added with little cosmetic consequence to the nicely done PCB.

The reduced tendency to thump when using a LF353, or similar op amp that is pin - compatible with the NE5532 might even preclude the need for other thump-reducing measures, such as the Fet audio muting suggested by others on this list, including the one I posted. It sure is worth a try if you were smart and socketed all your IC's. Or at least if you socketed U5, the NE5532! ;-)

Sorry for the long post, but I like to describe in detail what I mean and reduce the chances for ambiguity.

vy 72,

Gary Surrency AB7MY

QRP-L #571 Chandler, AZ (near Phoenix) Grid Square DM43BH
Az ScQRPions

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: SCN User <nwqrp@scn.org>
Subject: [17829] April 1997 NWQ Newsletter now Online!!

Yes folks that's true ... you can read all 9 pages via the web !!! ...

(See URL below) --Brian, KV9X

i	NorthWest QRP Club	-----
==[scn]==		--0---/\--
) (	nwqrp@scn.org	/^\^\/ ^^\
/_ \	http://www.scn.org/IP/nwqrp	--NW QRP--

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Ed Tanton <n4xy@bellsouth.net>
Subject: [17847] Buying an old TEK Scope (LONG)
Message-ID: <3.0.1.32.19970420114016.009afc40@mail.atl.bellsouth.net>

Question was: Is \$99 for a 545A a good local price, and what questions should be asked...

Hi Marty... first, even a price of \$99 could be high as a hamfest price. There are so many good scopes available, and people dislike taking up all that space on their benchtops, so their prices can be VERY low.

That said, they ARE fine 'scopes, and like the bunny just keep on working and working. Go look at the scope. Look inside. look in the back, around the power supplies. You will possibly see some buildup between some adjacent terminals on the white ceramic strips. That is silver migration. If it is not shorting the lugs, I wanted you to note it so that if you buy it you could remove it later. It CAN become a dead short, and was always a problem with those ceramic strips because Tek had to use a silver-bearing solder for adhesion and strength on them. Now for testing:

1. While you have it open, look at the fan... the motor needs to start up easily and quickly. It cannot really be repaired. Only in later years did they replace the motor type with one that could be worked on. If slow, add oil as possible on the shaft bearings (3-in-1). It should not be excessively noise. Look around-by the way-for crummy rewiring. If there is very much of it-forget it. Look at the air filter. If it is aluminum mesh, check the physical integrity for gashes/etc. If it is a black plastic mesh, pinch it and see if it degrades right there in your fingers. If they have used some substitute, replace it if you buy the scope.

2. With the 545 warmed up, get a trace on it, say around 1 ms with probe connected to the calibrator. Get about a 1/2 inch (1 division) trace stable on the screen-use Autotrigger, and center it. The trace should remain stable once set in the middle of its triggered range. Start by turning up the intensity control gradually all the way. As you increase the control, the brightness should linearly increase. It MAY stop increasing before the end, but should it reach a poing and then noticeable DEACREASE as you

continue, it is the CRT 'peaking' and should not be purchased. The days of THAT CRT are numbered. Also, while there will be some 'blooming' it should not be excessive early in the increase. Less a go-no item for purchase unless really bad.

3. Put the input switch to GROUND. Taking the palm of your hand bang pretty hard on top of the scope frame. If there is a ton of noise, don't buy it. A little is OK on a really hard lick. With the input still set to ground, move the vertical control up and down. Should do it without a lot of noise. Same for the horizontal. Switch to Ch 2 and repeat for the vertical and the bangs. In fact, for all these input tests, check first one, then the other channel each time. Set the DC Balance using the screwdriver pot on the plugin's panel. If you don't know how, look in the book.

4. With a stable cal signal on the scope, compensate the probe. It should not be excessively noisy. Take the probe cable and REALLY twist it around. You can't hurt it without tying it in knots and tightening hard! Shouldn't show problems when you twist. Set the mode on the plugin to AC. The trace should move to the center. Change to DC. Should move off center. Change the timebase to test whatever ranges to can with the built-in calibrator. Use both triggers. Test the various trigger combinations. On the cal sig you should be able to usually achieve a stable trace. If you know how, test delayed sweep. Especially note the 10T pot of the sweep positioning... it'll be noisy no matter how new, but not radically. If really bad, decide whether you REALLY need to look at square wave leading edges!

That's about it unless I'm forgetting something. The best overall plugin for a 545A is either a CA or one of the 1 series. Personally I would just as soon have a CA. They're pretty reliable, and do not use the difficult to find/expensive to buy nuvistors the 1-series plugins use.

There are some cover-off tests you can do with ONLY a wood rod or plastic ruler. Tap here and there with the scope on and the trace centered (GND.) Especially the rubber-covered resistors at the grid pins of the CRT. There shouldn't be a LOT of noise when you tap. Look at them, by the way, they should not be heat-discolored, or bulging. Run your ruler up and down the power supply wiring and watch for noise. BE CAREFUL! And don't stick the ruler into the fan.

That's about it. The handle MAY be overworn and untrustworthy. Be careful with it. Good leather handles can be a sign of a well-taken-care-of 545... as is the air filter. It should go without saying there should be no burns on the CRT.

The guy listed here is a GREAT source of TEK parts-even obscure ones and knobs. I have not needed anything for several years, so you may have to check for a newer listing. He is also reasonable, and a nice guy.

Deane Kidd
27270 SW Ladd Hill Road
Sherwood, OR 97140

Some suggestions for bargaining: any of the above factors, when lacking, can be used to work on the price-as long as they are not killers. Put the covers back on. As you are bargaining, check in the little compartment on top. It was for a small operator's manual. No big deal, but if it is missing, point that out. What about probes? At that price there ought to be at least one WITH it... preferably TEK. What about the main manual? Gonna cost you \$20-\$25 bucks unless you luck out. New handles are NOT CHEAP and VERY hard to get. Worth a \$25 deduction easily if NG. Print this off and take it with you. I know what I'm talking about, and your seller ought to listen also-show it to him if he balks about this.

Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX

INTERESTS: DX QRP BoatAnchors Test Equipment Photography
CW: 99.9% ORP: 95-100% (Mood swings!)

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Bernie Doehner <bad@uhf.wireless.net>
Subject: [17866] buzznot and a VW (Jetta) engine.
Message-ID: <Pine.BSF.3.95.970420151622.18595A-100000@uhf.wdc.net>

Hi:

I have always had terrible ignition noise on HF (with a 84 VW Jetta).
The noise blanker in my IC-725 is pretty useless I have found.

I know this is a long shot:

But, just wondering, are there any VW owners who have used the Buzznot
(wilderness radio) noise blanker while mobile?

Thanks.

Bernie nu1s

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: wb2vuo@juno.com (William K Hibbert)
Subject: [17815] Changes at KB2YTW/B
Message-ID: <19970419.222416.7551.0.wb2vuo@juno.com>

I have developed problems with the 250 mW TX at the B/BAMS 10 Meter
beacon, so I have to put the "old" TX back on line. As of 20 April, the
KB2YTW/B beacon will be running 4 watts instead of 250 mW, and 11 dB
increas, but still QRP. For the 10 Meter lists, the line for KB2YTW/B
should read like this:

28.2870....KB2YTW.....BERGEN, NY, FN13AC....4W GP....

It will probably run at this power trrough the summer, which will help
signal sporadic-E openings better anyway...

The site MAY, and I emphasize MAY change this summer, but only by a
couple of miles. If so, I will post the info here on the QRP-L and
froward to interested parties...

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, 100% QRP
Tech Specialist (ARRL/WNY), ARRL Life Member,
Trustee, KB2YTW/B 10 Mtr QRP Beacon (4 Watts @ 28.2870 MHz)
"In the Depths of the Great Bergen (NY) Swamp...FN13ac"
Packet - wb2vuo@w2im.#wny.ny.usa.noam *** Email - wb2vuo@juno.com
SnailMail - CBA *** Phone - 716.494.1239

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Russ Carpenter <russ@natworld.com>

Subject: [17875] CHECK OUT THE 89er
Message-ID: <199704202101.RAA100161@nss2.CC.Lehigh.EDU>

Randy, WJ4P, recently made history in the Spartan Sprints. He won both categories of the March Sprint, using what some would describe as a "novelty" radio--an 80 meter version of the 40-9er. He ran up an excellent score and made a cross country contact with the contest manager identified hereinbelow.

Adventure Radio Society has posted a photo of this crafty little rig, and you can get there directly with this URL:
<http://www.natworld.com/ars/photos/>. Or you could have a good time by rambling through the site with this URL: <http://www.natworld.com/ars>.

Russ Carpenter, AA7QU
ARS Contest Manager

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Don Faith <Faithd@worldnet.att.net>
Subject: [17858] Dan's Centenial 80m (75m) SSB Kit
Message-ID: <335A5474.13C7@worldnet.att.net>

I just received my Centenial 80m SSB kit from Dan's yesterday (Saturday).

The kit consists of a manual (step by step type instructions), a 4" x 7.75" or so board (mfr. by FAR circuits) and most all of the needed components. (Need to provide case, ext. connectors, mike, knobs, dial, speaker, spacers yourself). The kit does come w/ the pots needed (incl. a 10 turn pot). It looks like it will be a fun kit that I will be able to use on our local 75m Sunday AM net.

The rig uses a 3 pole xtal filter used for both Rx and Tx (5.185 Mhz IF). The VFO is also shared by the Rx and Tx sections. The rig uses 5 NE 602's and a couple LM 386's. The final is a power FET in class AB mode. For those interested in details but not ready to jump in to try it, Dan appears to be selling a copy of the manual, the cost of which is subsequently deducted from the cost of the kit (if ordered).

The manual states that it provides full band SSB coverage, has 5 to 8 watts output and a cw option is available w/ an external adaptor (this appears to be a keyed oscillator circuit w/ manual T/R; signal fed through the mike input). The sine

wave
input creates a RF sine wave offset below the carrier freq. (offset is the same as the
freq. of the input tone.). Am not sure, but I suspect that this is the reverse of how a
CW signal is normally received / sent and is equiv. to CW-R mode on QRO rigs. In a QSO
with this rig, the two people communicating would be listening on opposite sides of the
shared CW freq. In the normal situation, each would listen at nearly the same freq. and
transmit on the same (nominal 600 hz higher, USB mode) freq.

Now the decision is which kit I should start (or finish): I still haven't started my Rainbow tuner, or my marker generator kit. My 38S and Novice band 48S are largely
finished but am still tweaking these: I am having problems with the offset and have
an intermittent problem with the tuning (sometimes it won't change). I am waiting for
some different molded inductors to try for both of these. I will probably get started
on this kit this afternoon anyway. If there are any specific questions, I will answer
them as best I am able: I am not a wizard at this stuff. Anyone else out there gotten
their's yet?

73 (es 72) de N9WR, Don C. Faith III

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Doug Hendricks <ki6ds@dpol.k12.ca.us>
Subject: [17869] Dayton Shopping List
Message-ID: <3.0.1.32.19970420125705.006ccb38@telis.org>

Recommended Shopping List at Dayton:

Guys if you are going to Dayton, you absolutely must stop by the G-QRP Club booth and buy the following books. I recommend these very highly, and you will not be sorry that you purchased them. Ok, here they are:

1. Pascoe's Penny Pinchers by Dick Pascoe

This is a collection of antenna projects that cost 'Pence not Pounds'
Simple wire antennas in various forms that will help the beginner and the more enthusiastic. Even a selection of hidden antennas showing how to hide them from prying eyes.

If you don't want to hock the family farm, live in an area that is small, have neighbors that don't like "Antennas", and want to keep a low profile, then this book is for you. Very inexpensive, but very well done. Every ham should have this book, if for no other reason than to loan to the "beginners" who alwasys have so many questions about antennas. [KI6DS]

2. Radio Projectrs for the Amateur by Drew Diamond, VK3XU. Here is the table of contents:

- DC 91, Direct Conversion Receiver for 80M
- Computarock Receiving Converter
- Simple LF Receiving Converter
- Receiving converter for 2M
- Computarock HF Receiver
- An Empirical Approach to Building an HF Receiver
- Some VFO Notes
- Simple Tuning Dial from Junk Box Parts
- Mosfet-4 CW VFO transmitter for 80M
- Multiplier CW Transmitter for 3.5/7/14 MHz.
- Simplex Sidebander for 3.580 MHz.
- TCF Transceiver for 80M
- TCF Transceiver for 40M
- 25 W Mosfet Linear Amplifier
- 12 Volt 1 Amp Regulated Power Supply
- HFC Regulated Variable Voltage Power Supply
- A Simple Dip Meter
- Power Meter/Dummy Load (with Notes on PEP)
- Handybridge Impedance Bridge for HF
- Little-L Inductance Bridge for RF Coils
- Paddy Board Circuit Construction
- Making Simple Circuit Boards
- You Can Solder Aluminum
- Variable Capacitors made from Trimmers
- On Winding Transmission Line Transformers
- Making Air Wound Coils for HF
- Notes on Soldering
- Modified Twist Drills for Sheet Metal
- Radio/Electronic Component Sources

What a gold mine of information. I absolutely love this book. I think the cost is \$15, and very well worth every penny. Get to the G-Club booth early, because you don't want to miss this one.

3. Back issues of Sprat. George always brings back issues of Sprat, and they sell for \$1 each. Go down the line, and pick up one of every issue that he has. This is the bargain of Dayton. While you are at it, also pick up some of the G-Club binders to hold your back issues. Another great bargain and a must if you are going to keep track of your issues. I have 5

of them.

4. While you are there, pick up another 38 Special Kit. NorCal is sharing the G-QRP Club Booth this year, and we will have 38 Special Kits available.

Other Must Have Items:

1. Columbus QRP Club Micronaut Receiver Kit. For \$18, how can you not buy one of these? See Steve Bornstein at the QRP Hospitality Room every night.

2. Embedded Research's TiCK-2 Keyer. You can buy a memory keyer chip for \$10!! Yes it will drop right in your 38 Special, and all that you have to add is 1 pushbutton control switch! See Gary Diana and Brad Mitchell at the Hospitality Room, again, every night. They will have their full line of Pic based keyers at the show.

3. Stop by FAR Circuits booth out in the Covered Tent in the far corner of the Flea Market. It is the Northwest corner I believe. Near the Radio Shack display. It is a red and white striped tent, if you can't find it, ask. Fred will have all of the boards that he sells in his catalog there. Pick one of your favorite projects and save the shipping and handling. Plus, you will get a chance to meet and say hello to Fred Reimers, who is one heck of a nice guy.

72, Doug, KI6DS

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: "Carol N. Wright" <cnw@HiWAAY.net>

Subject: [17872] Drake gear?

Message-ID: <Pine.OSF.3.94.970420151325.21790B-1000000@fly.HiWAAY.net>

Hey Gang,

I was wondering, not really QRP related, if I could get some help on a Drake rcvr transmitter set? I have a friend who has the Drake 2NT, the transmitter, a Drake 2C, the receiver, and the Heathkit HG10B, VF0.

He is looking for the schematics and possible the manuals for these pieces of gear. He will take copies or the original, he will also pay for shipping and handling and any other costs involved in getting the schematics and manuals to him.

Please if you have any of the above and have the manuals that you could copy or the schematics for the above that you could copy it would be helpful to him. Please email me and I'll get him the info. Best 72/73 DE Matt, AE4JM

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JCARC--ARCI 9178--ARRL--ARRL ORS--Ten Ten 66932--VP 2855--WAS
Matt Wright, ph. (205)228-6547, packet: AE4JM@K4BFT.#HSV.AL.USA.NA
email: cnw@HiWAAY.net snail mail:8679 Co. Rd. 19, Section, AL 35771
Rigs built: Ramsey mini rcvr-40mtrs, NC38S, SW30-40, NC49'er, NC40A with
KC1, and SWL GM-20.

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Gary M - W2UX <MAIL4GARY@worldnet.att.net>
Subject: [17817] Enamel remover for wire??
Message-ID: <3.0.1.16.19970419213258.3277c5c4@postoffice.worldnet.att.net>

This has been beat around before I'm sure. But what is the best solvent
for getting the enamel off my toroid coil wire ends? I should also ask
what is readily available because the correct and best stuff is not always
available locally.

I have scraped it off....cautiously....but I know that is not the way it
should be done.

Thanks for the help.

73 / 72	QRP ARCI # 8911
Gary - W2UX	QRP-L # 593
Lexington, SC	CQC #413
(EX: WA2UAX)	
CW is the REAL THING!	Use it or lose it.

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Gary M - W2UX <MAIL4GARY@worldnet.att.net>
Subject: [17878] Enamel remover results...
Message-ID: <3.0.1.16.19970420065852.382f1a60@postoffice.worldnet.att.net>

Out of 16 replies:

10-burn it off (flick the BIC) and lightly sand wire
3-solvent
3-scrape and sand

Thanks to all who have replied. Guess I know what to do now.

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: HIMES@idic11.idi.oclc.org
Subject: [17855] FET_THUMP_MOD_WORKS
Message-ID: <01IHXHTYK7KIAR406T@idic11.idi.oclc.org>

Hi folks,

I did Niels' (VE6NJK) FET thump mod on my 38S and the thump is now reduced to a barely-audible little click. There's even room in that area of the board to drill little holes and stand the parts up like they were meant to be there all along.

Marty WB8FNH

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: mike@krypton.nmr.Hawaii.Edu (Mike W. Burger)
Subject: [17818] first 30 meter contact
Message-ID: <9704200242.AA00396@krypton.nmr.Hawaii.Edu>

Got the module for my TenTec for 30 meters. Got my pitiful lanai wire fitted out with some end loading coils to stretch it. Saturday morning I tuned it up, and both 40 and 30 were DEAD, except, wait, one signal on 30 meters calling CQ like crazy at 10.106 at about 22:20 Zulu with a wierd callsign. By the time I got the TenTec hooked up he was buried in JA's trying to work him. Turned out the call was K1NT/KH4 blasting along faster than my confortable code speed, but he was giving everyone a 5NN so how hard can it be? He answered me out of the pileup on the second attempt! Then horrors, instead of just firing off the 5NN, he stopped to ask a question. I send back an answer to what I thought I copied and everything seemed fine. However, I did flash on that scene from "Hunt for Red October" where the captain at the periscope says "For all I know I could be sending him measurements on the playmate of the month". Time for more practice. I just got RUFZ installed to play with, very nice program. I also received an MFJ418 code tutor module. Also very nice for practicing head copy.

Mike AH7R

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Kelly Ellison" <kelman@dialnet.net>
Subject: [17860] FM 6 meter rigs
Message-ID: <199704201809.NAA20625@shell.dialnet.net>

Hello all

I still have the 2 Regency single channel 6 meter rigs. One is 10 watts and the other is 50.

If there is any serious interest in these units, please make an offer.

They both have 52.470/53.470 MHz.

This is one of these things I bought at a Hamfest and don't really know why. Maybe someone else can use these units. Email me for more details.

Kelly Ellison
WB0WQS
Aurora, Missouri
QRP-L #702

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Marshall Emm" <mgemm@mtechnologies.com>
Subject: [17832] FS OHR Spirit II (Unbuilt)
Message-ID: <199704200545.XAA24564@lynx.csn.net>

I'm selling an Oak Hills Research Spirit II for 20M on behalf of a fellow CQC member who has decided not to build it-- it's untouched. I think they have been discontinued in favor of the OHR 100, which is a pity in some ways because this is a really nice rig (like a single band version of the OHR400). The receiver "sounds" different from an NE602 based front-end and it has an air-variable VFO tuning cap.

Here's the CQC Swap List entry (<http://www.mtechnologies.com/mthome> then look for the CQC Logo-- and there are a couple of other OHR kits there).

OHR Spirit II for 20M classic rig with ring diode mixer, rx pre-amp, 4pole xtal ladder if filter, 4-pole audio filter, switchable AGC, side-tone osc, rf gain control, RIT, QSK, 0-5W out, jacks and speed control pot for keyer (not included). RRP \$170, asking \$125. Price is post paid and you can call me and use your CREDIT CARD. Marshall Emm AA0XI CQC#154 2460 S Moline Way Aurora CO 80014 (303)752-3476 or (303)752-3382 EMAIL: aa0xi@mtechnologies.com 4/7/97

73

Marshall Emm
AA0XI/VK5FN
aa0xi@mtechnologies.com
<http://www.mtechnologies.com/mthome>

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Mark.Milburn@cybrtech.com
Subject: [17850] FSFM 50/40/30
Message-ID: <199704201616.MAA104951@nss2.CC.Lehigh.EDU>

Greetings!

This week is Iowa week for FSFM, and on Tuesday night (April 22nd local time)
I will be looking for contacts as follows:

7:00 PM - 9:00 PM CDT	10.115 MHz
9:00 PM - 10:00 PM CDT	7.112 MHz
10:00 PM - 11:00 PM CDT	7.043 MHz

Iowa isn't usually too hard to get for WAS but maybe for 2 x QRP?
We'll see. Drop by. I will NOT be running high speed, and I'll try to
answer at whatever speed you find comfortable.

72/73 Mark

KQOI @ WOAK.#CIA.IA.USA.NOAM e-mail: mark.milburn@cybrtech.com
ARRL-DMRAA-QRP-L #625-NORCAL #1829-ARS #139-NW QRP #418-QRP ARCI #9226
WIMPS Qs=006, 30m=06, 17m=00, 12m=00, States=05, Provinces =00, DX=01

... nfx v2.6 [C0000] Growing old is mandatory - growing up is optional

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Len W. Touth" <len@infinet.com>
Subject: [17839] Fwd: Builder's Report - MRX-40
Message-ID: <199704200944.FAA08806@mail1.infinet.com>

Hi Gang!

The First of the *un-solicited* builder's reports on the MRX-40 is in!
Thanks To N8TUT.
Here it is.....

Guys;

I just finished my MRX-40. It took me a couple of hours (I'm slow) and it worked the first time. It's a great little kit. The instructions were

clear but not overdone. The parts/in² was quite high but not a problem.

I thought the NE612 wasn't going to fit next to C9 but it snugged right it, it just didn't look like there was much clearance, don't know how a socket would affect it...

A couple of other small points. The note about the wire being too big was right on the money. I removed 3 strands and it was still a tight fit.

Also the last paragraph of the instructions mentions "J4" controlling sensitivity and "J5" controlling tuning. It took my weary brain a second

to realize I didn't have to control tuning & sensitivity with the jacks!

It was lotsa fun putting it together and all together a high quality operation. I look forward to CQrp's next offering.

72 + 1 de N8TUT Doug

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Carol N. Wright" <cnw@hiwaay.net>
Subject: [17820] GM20 alive and well!
Message-ID: <Pine.OSF.3.94.970419211648.15711A-100000@fly.HiWAAAY.net>

Hey Gang,

I recently wrote a post to the list about getting either a GM20 by NN1G or a NW8020 for 20 meters by Emtech. I was asking about comments or suggestions or likes and dislikes of both of the rigs.

Well I got quite a few great posts on both of the rigs. I decided on the GM20, even though it doesn't come with a case enclosure which I am usually accustomed to.

Everything in the kit was there and well packaged except one diode, no sweat though, I had the diode in my junk box. I really like the headers that the kit comes with, it makes wiring easy and makes runs from the main circuit board to the case a lot neater and nicer looking.

I got started with the construction of the rig, first you build the Heterodyne L0 section of the board. I built the L0 very carefully and then tested it to specifications. I really like how Dave has the manual setup so that if you don't have a great test bench--like me :^)--you can still align and test the rig using a general coverage receiver, a VOM, and a small circuit which is included with the kit. You use a VOM and the small circuit to align the L0.

I got the L0 aligned to specifications and then started with the rest of the rig. I installed the resistors, capacitors, IC sockets, etc., and installed the IC's, toroids, and header pins last.

I then hooked up the headers to pots and connectors and got all the headers wired up except for the RIT pot, which I decided to wait until later to wire up.

I then connected up 13.8 volts and a dummy load. Then I connected up phones, a key, and a antenna and dummy load. I set my frequency to where I wanted it by listening to the 22 mhz signal on a general coverage receiver and adjusting some caps.

Next I aligned my receiver. I adjusted it to have the most atmospheric noise in the head phones. At first I couldn't really hear any signals on my GM20 receiver, I just figured that the band was dead because I could hear my big rig signal on the GM20.

Then I aligned the transmitter section on my GM20. I tuned up C40 and C45 for maximum signal on the s-meter of the general coverage receiver and then turned up R1 all the way up.

This is where the bad news starts. I couldn't get any output from my transmitter. I tried numerous things, rewound T2, adjusted the trimmer caps again, and even installed a new driver. All of these steps still didn't bring any life to the receiver.

So because of Dave's great service, he has an email address so that he can give troubleshooting advice online or over the phone line, even via snail mail.

So I sent Dave a email message and he replied quickly. After a few email messages from Dave I started testing the voltage check points. One of the voltages that I measured was wrong so we solved it by installing a new resistor. Now the voltage was up to par. Ok now let's hook up the rig up again to the dummy load and see if I can get any ouput from the transmitter. No, still no ouput.

Well I know Dave had to be getting tired of me after about four or five email messages. Dave was being patient with me though and was trying

really hard to get my rig going over email messages so I wouldn't have to send the rig back to him.

After I readjusted C30 and C34 I started seeing the s-meter on my big rig go up. That is strange. I happened to look up at my watt meter on my dummy load. Wow! There is a small output. Knowing my I went ahead and tried to make a QSO at about 500mW, no comebacks on my CQ. I looked at my GM20 laying on the bench haywired together and lookie what I found. R1, which is the variable power output pot was turned all the way counter clockwise. Doesn't that mean the least power output at the most counter clockwise position? Yes, it sure does.

I grabbed an insulated tool and rotated R1, the variable output power pot, clockwise and the power started going up, 1 watt, 1 and a half watt, then the finally about 2 watts.

I then realigned the L0, frequency, receiver, and transmitter. It works like a charm. The GM20 has a great receiver and as far as I know a great transmitter. The sidetone is nice and no really signs of thumps.

Where as I was hearing no signals, except for my big rig, I now hear a great deal of signals from everywhere. So now I have a perfectly working rig and just need to put it in a case and get the case looking nicely.

Has anyone had similar problems with their GM-XX series rig(s) I would like to hear from you. I would also like to hear from you if you have any mods and how you went about putting the GM-XX series in a case/enclosure. Are their any mods to the GM-XX series?

Now I just got to add my RIT pot and put the GM-20 in a case. So thanks a lot to everyone for helping out with my choice of the GM-20 and also the comments that I got for case ideas for my rig. Any comments are more than welcomed, even ones that I might not like. Hee Hee!

Best 72/73 DE Matt, AE4JM

JCARC--ARCI 9178--ARRL--ARRL ORS--Ten Ten 66932--VP 2855--WAS

Matt Wright, ph. (205)228-6547, packet: AE4JM@K4BFT.#HSV.AL.USA.NA

email: cnw@HiWAAY.net snail mail:8679 Co. Rd. 19, Section, AL 35771

Rigs built: Ramsey mini rcvr-40mtrs, NC38S, SW30-40, NC49'er, NC40A with KC1, SWL GM-20.

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: Jim Stafford W4QO <w4qo@America.Net>

Subject: [17827] Hamvention QRP forums

Message-ID: <33599161.372C@America.Net>

Maybe I missed it, but does anyone know if there will be QRP forums at the hamfest? If so, when and who will be the speakers? Thanks.

--

Jim Stafford, W4QO ->NoGaQRP Group<- RadioActive Schools(sm) -
11395 West Road ->VP - QRP.ARCI<- Using amateur radio as
Roswell, GA 30075-2122 a teaching tool in north
770-993-9500 Internet: w4qo@america.net Georgia area schools.
QRP-L#267 QRP-ARCI#6515 G-QRP#5588 MiQRP#897 NorCal#1092 CQC#307

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [17812] Heathkit knobs found
Message-ID: <Pine.SUN.3.91.970419192923.11896A-100000@kitsune.swcp.com>

To the person that was looking for the Heath knobs, I found about ten of the small gray knobs that I think someone was looking for. Get back to me via e-mail and give me your address. Tom WB5QYT

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Stan Wilson <microres@crl.com>
Subject: [17842] IS the days of Micropower limited ?
Message-ID: <335A237B.3CF9@crl.com>

RE: Some Scary facts

Bernie nuls (bad@uhf.wireless.net) has rasied some serious questions for amateur radio in general and particularity low-power or weak signal amateur communications of the future.

First I do not claim to have any answers or even fully understand the technology. I do however have many questions. After reading the various postings (RE:Some scary facts) I went back to the text books. I had always considered spread spectrum a solution to crowding. I had not considered the possible costs to those who did not operate in that mode.

At present we enjoy many different modes within a given band width. SSB,CW, digital, FM, and even AM. A station operating any of these modes via a band plan do not cause me any interference if I operate in my chosen mode. (i.e. SSB on 7.2 mhz has no effect on 7.040 mhz CW operation, etc.)

The same can not be stated for spread spectrum operation. Ref: ARRL handbook It states "the filtered spread spectrum signal is apparent only as a +10 db hump in the noise floor." They even include a graph.

Question 1 : What happens to the micropowered CW signal that looks like a 0.1 uVolt input to my receiver when the noise increases by 1 1/2 S units? Now that is a big hump

Question 2 : Power control - Initially it is great, those QRO stations are going to be reduced in power. Maybe ? Power control says that I am not getting a good signal therefore the path needs more signal therefore my QRP signal must be QRO. The station next to me needs more signal, again increase the power. What happen to micropower signals ?

Bernie suggested discussion about the impact. He is correct we do need both discussion and facts. Not about SS interferece with SS, but what happens to SSB, CW, etc. if the bands go SS.

I do not have the answers but would like to see the questions answered by the ARRL, FCC, experts, etc.

Will micropower stations be a thing of the past ?

de Stan AK0B

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: pmeier <pmeier@tir.com>
Subject: [17846] Items for sale - long
Message-ID: <199704201532.LAA18478@tir.com>

Time to raise money for Dayton so here are couple of items.

St. Louis Tuner built and painted with cream colored front/rear panels and dark brown covers. Front and rear panels are lettered to indicate switches and functions. Built and painted by me. Looks and works very nice. Manual included. For those who don't know about it, St. Louis Tuner uses to air variable caps and tapped torroid inductor, has balun for balanced lines, connectors for BNC, UHF, RCA, Balanced Line, Long Wire. It also has a built in QRP dummy load, bypass switch and displays both forward and reflected power at the same time.

Price is \$105 which includes shipping

Wilderness Sierra with KC2 w/front panel and modules for 20 and 40 meters. Again this unit is built by me and works fantastic. I have added the ferrit bead to the driver and most wiring (including KC2 uses gold-connected jumpers for easy dismantling for trouble shooting. Manuals included.

Note: The back panel is not stock in that before KC2 was added it had holes drilled for the KC1. These holes are plugged but still there. Otherwise the unit is in excellent cosmetic condition.

Price is \$315 including shipping.

Outbacker Perth Mobil Antenna - Covers 10-80 meters. Only used portable so in excellent condition with no corrosion. Also have a tripod w/mount and radial cut for 40 meters and a K40 mag mount (new) capable of holding the Outbacker at highway speeds. Will only offer the tripod and mag mount as accessories to Outbacker (will not sell they by themselves)

Price for Outbacker Perth is \$185 plus shipping.

Price for tripod w/mount is \$15

Price for K40 (new) is \$15

Kenwood TS50 - covers all bands/modes w/general coverage receiver. Does not have CW filter. Set to power levels of 5/10/100 watts . Manual and original box. Has new front face plate. Looks and works excellent.

Price is \$710

All pricing includes shipping. Can be prepaid or add \$5 for C.O.D.

Email if seriously interested to pmeier@tir

Pete WK8S

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: Kory Hamzeh <kory@avatar.com>

Subject: [17835] Just had my first contact!

Message-ID: <Pine.BSI.3.91.970419231007.26671B-100000@avatar.avatar.com>

Hey! I just had my first QRP contact and it was also my first contact on the Sierra! What a rush! I worked N7MOB I'm located in So. Cal. Worked him on 40m using 3 watts. My antenna is a 40m/80m inverted V.

I'm addicted!

Kory

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Michael <MichaelN@cycat.com>
Subject: [17853] Kits wanted for 10, 6, and 2 meters
Message-ID: <335A4FC2.4CE5@cycat.com>

I'm looking for kits (prefered, I'm a bit lazy and busy) or plans for
QRP rigs for
10, 6 and 2 meters.
CW, and/or SSB for all, and AM for 6m.

Anybody have anything?

thanks

michael N6CHV

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: KR4GL@aol.com
Subject: [17868] Listening Now at 10.121
Message-ID: <970420153852_-2104188041@emout19.mail.aol.com>

I'm puttering about the family room here 5 miles from Dulles Int. Airport.

Have the ICOM 751A on 10.121. Can work at QRP leve if desired.

Antenna is a Butternut HV-6V ground mounted. Band is noisy but not as bad
as it has gotten before.

de KR4GL
John Foote

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: n0acs@juno.com (John R. Morris)
Subject: [17836] LITZ wire
Message-ID: <19970420.001706.5471.6.N0ACS@juno.com>

Hi gang,

I have never worked with Litz wire, and have found it very difficult to strip and pre-tin the ends. What I have is silk covered, enamel and of course multi-strand. The spools I have is new, of old manufacturer. I got a whole box of them in the American Crystal stuff I bought. I would suspect their manufacturer was early 1940 war years.

Has anyone worked with this variety of litz wire, and have any recommendations on how to properly strip and tin the ends? I cannot recall the specs as the stuff is out at the shop but if my memory serves me correctly it was 7/42. Any way I would like to use the stuff to wind some RFC's and coils so any suggestions would be appreciated.

Also since I have more than I could use in 10 lifetimes, I would be willing to share it if anyone else is looking for this type wire. I know I tried for a number of years to locate some, and just never could find very much.

Interesting side note.....some of the boxes I carried out from up there were imprinted with large red, white and blue labels of the old "military eagle" symbol and imprinted with the words "RUSH IMPORTANT WAR MATERIAL".

In these times few of us realize that these old gentlemen which has supplied us with the radio crystals we've used in the pursuit of our hobby for so many years, were all working in the 1940's war effort, and have remained faithful to continuing to supply us for all these years. I know at 58 I've had many past days of tear stained eyes as I have watched the demise of National Radio, Hallicrafters, RME, Johnson, and a multitude of others we all once thought would last forever.

73

John @PHOENIX CRYSTALS

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Frank G3YCC <g3ycc@gqrpclub.demon.co.uk>
Subject: [17851] Mini Tuner
Message-ID: <861551902.1117842.0@gqrpclub.demon.co.uk>

The circuit for the min tuner is now available:
<http://www.demon.co.uk/minitnr.htm>
Frank G3YCC
QRP Web Site: <http://www.gqrpclub.demon.co.uk>

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: pmeier <pmeier@tir.com>

Subject: [17854] newgroups- radio?
Message-ID: <199704201725.NAA09102@tir.com>

Any know the name of the ham radio swap newsgroup? Can't seem to find it.

Pete WK8S

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: pmeier <pmeier@tir.com>
Subject: [17861] newsgroups help-thanks
Message-ID: <199704201812.0AA17386@tir.com>

Thanks to all for the newsgroups help.

Pete WK8S

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: ed.welch@cheaha.com (ED WELCH)
Subject: [17824] non-corrosive "silicone-type" adhesive???
Message-ID: <8D634F6.00040025AA.uuout@cheaha.com>

I'm going to put together a small solar (PV) panel and I'm curious about which type of adhesive to use to attach the individual cells to the backing material. Seems I've heard that the "vinigar" smell signifies a possibly corrosive substance. Anybody got some recommendations, suggestions? Any other tips, hints, comments in regards to putting the panel together will be appreciated, too! Tnx!

72/73
Ed Welch KF4KRV
NorCal Member #???
1st Grand Poobah ScQRPion of Alabama
QRP-L #873 - FISTS #2964
Luverne, Alabama
Crenshaw County - Grid EM61

+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+

> Isn't "time" a 4-letter word? <

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Robert Marlan <rsm@halcyon.com>
Subject: [17865] OHR WM1 vs WM2
Message-ID: <3.0.32.19970420120721.00fa7b58@mail.halcyon.com>

Does anyone know the major differences between
these kits. They seem to look very similar...

Is it just the meter mechanism. Is it worth
upgrading the meter????

Thanks
Bob KA6NOC/7
rsm@halcyon.com

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Allen Jones <ajones@adsnet.com>
Subject: [17852] OHR 100 Alignment
Message-ID: <1.5.4.32.19970420171523.0066d5f8@206.158.2.1>

I'm just about to the alignment stage with the OHR 100 (40M) that I've been
working on. The manual states that a scope **must** be used for the alignment
but I know that there are folks on this list who have had success and didn't
use a scope. What procedure did you use?

Thanks

Allen Jones, W9DZ
Michigan City, IN
ajones@adsnet.com

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Robert Marlan <rsm@halcyon.com>
Subject: [17864] OHR 100 vs Explorer II
Message-ID: <3.0.32.19970420120710.00f406c0@mail.halcyon.com>

Does anyone know the major differences between
these kits. They seem to look very similar...

Are there any upgrades or mods for the explorer II?

Any big performance differences?? What have been
people's experience with the Exp II???

Also is there any way the tuning can be expanded
so I can work novice and extra class portions???

Thanks
Bob KA6NOC/7
rsm@halcyon.com

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: KFGlynn@aol.com
Subject: [17811] Pls need copy of last QRPP
Message-ID: <970419211252_-334176911@emout01.mail.aol.com>

Hi gang,

Unfortunately I did not receive the last issue of QRPP. I'd greatly
appreciate it if anyone could make a copy and mail to me. I will gladly
reimburse copying and postage costs.

Tnx for the help.

72 Kevin N2T0

Kevin F. Glynn
429-73rd Street
Brooklyn, NY 11209

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Doug Hendricks <ki6ds@dpo1.k12.ca.us>
Subject: [17871] QRP Booths At Dayton
Message-ID: <3.0.1.32.19970420130450.006ccb38@telis.org>

Guys, I have an idea but no time to make it happen. What I would like to
see is a list of the QRP booths that will be at Dayton. Here are the ones
that I know will be there but don't know what space they will be in. Does
someone want to volunteer to take the information and compile it for the
list? I would envision something like this:

G-QRP Club
Space: XXXX Location: Inside Hara Arena
Items: Kanga Kits, G-QRP Club publications, Signup or renew Sprat, Examples
of projects made by G-QRP Club members.

NorCal QRP Club

Space: XXXX Location: Inside Hara Arena
Items: 38 Special Kits

Michigan QRP Club
QRP ARCI
Wilderness Radio

Others?

Jim Skalski of the Buffalo QRP Connection is planning on having a flea market space. It might go something like this:

Jim Skalski
Space: XXX Location: Outdoor Flea Market
Items: ???????????? (Jim would list his items here).

I think you get the idea. Any takers? 72, Doug, KI6DS

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: wa5whn@juno.com (Jay D Miller)
Subject: [17816] QRPTTF now at T minus 6 days & counting.
Message-ID: <19970419.194150.4455.1.wa5whn@juno.com>

QRP-Lers,

W5BI, WB5LYJ & I will be operating on HF SSB (15, 20 & 40 meters) & CW probably most of the time, for this event. I would like to collect some of these commemorative QSL cards & certificates that are being offered from some very unusal sites too. Could I find out what stations will be offering these cards/certificates ? WOW ! a QRP Field Day and every station is a special event station. Now there is a goal, WAS-QRP from all strange & wierd sites, plus Canada too.

There have been a rash of strange sitings, just south of Manzano, NM (Remember that town from the news ? Former Heaven's Gate Hq.) Any takers from NM, for QRPTTF, at or near that site ?

Is anyone, in New England, going to operate from Longfellow's Wayside Inn (<http://www.wayside.org>), since that is where "The Headless Horseman" had come to life, in a very imaginative mind ?

BTW, if You hear a low freq. hum on a signal, from a NM station up near Taos, NM ("Taos Hum"), that's normal. ;-)

From someone who is Abie-Normal...Jay, WA5WHN

<http://www.flash.net/~w5bi/>

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: wb2vuo@juno.com (William K Hibbert)
Subject: [17826] QRPTTF: Lake Ontario Shore
Message-ID: <19970419.233244.7551.1.wb2vuo@juno.com>

I wasn't going to post until I found the details, but I don't seem to have the book I want, so this is from the family's oral history...

Back around 1954, I was young and don't remember exactly when, the tugboat, M/V Oswego left the harbor at Charlotte, NY (Rochester) and headed back to its homeport in Oswego, NY. It never arrived, and no wreckage was ever found, not planks, life preservers, NOTHING... The Coast Guard didn't even get a radio message about problems.

My Dad told me that the Oswego was last seen was from Chimney Bluffs in Sodus, NY. After that, the tug disappeared as if it had sailed into a crack in Lake Ontario, and just dropped out of site...

Chimney Bluff is a natural formation produced by wind & wave erosion, and rises to 130 - 150 feet above the Lake Ontario shore. The edges are not accessible due to the crumbly nature of the soil & gravel on the edges, but there's a parking lot and trails up to the "stable" sections on the bluffs. I scoped out the site today, and I may be able to string a Double Extended Zepp for 40 Meters from the trees above the lot over to the adjacent hillside, and drop the twinlead right down to the tuner. If so, the center of the antenna will be up about 80 - 90 feet !!!

Look for me on 40 and 20 Meters, and maybe even 80/75M. I will be on with a deep-cycle marine battery, so duty cycle shouldn't be a problem...

Depending on who goes out with me, or not, I/we may even have another Argo or Argosy on line with other antler, type and size not yet determined...

See you on for QRPTTF...

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, 100% QRP
Tech Specialist (ARRL/WNY), ARRL Life Member,
Trustee, KB2YTW/B 10 Mtr QRP Beacon (4 Watts @ 28.2870 MHz)
"In the Depths of the Great Bergen (NY) Swamp...FN13ac"
Packet - wb2vuo@w2im.#wny.ny.usa.noam *** Email - wb2vuo@juno.com
SnailMail - CBA *** Phone - 716.494.1239

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Carol N. Wright" <cnw@hiwaay.net>
Subject: [17834] QST W1AW Receiver
Message-ID: <Pine.OSF.3.94.970420010440.5519C-1000000@fly.HiWAAY.net>

Hey Gang,
Has anyone built or breadboarded up that W1AW receiver in QST this month? Looks pretty easy, I got all of the stuff up for it yesterday, Saturday, out of my junk box and I think that I'm going to try it. Anybody else tried it? How do you like having such a handy rcvr in such a small package?

It would be great for future hams learning the code or for hams upgrading.
Best 72/73 DE Matt, AE4JM

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Joe Everhart <n2cx@voicenet.com>
Subject: [17809] Rainbow Wiring App Note
Message-ID: <199704200001.UAA19158@mail3.voicenet.com>

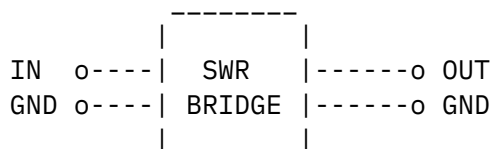
Gang,

I've had several questions about how to wire up the Rainbow Tuner. Here is some info about how it can be wired up.

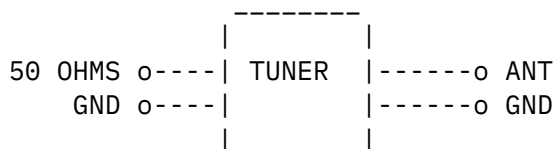
Shucks, the wiring diagram in the manual is clear to me! ;-)

Rainbow Wiring - Sorry, no pot of gold just yet!

The Rainbow consists of two main blocks, an SWR bridge and an antenna tuner. The two are not connected together on the pc board so that they can be used separately. The blocks are shown below:

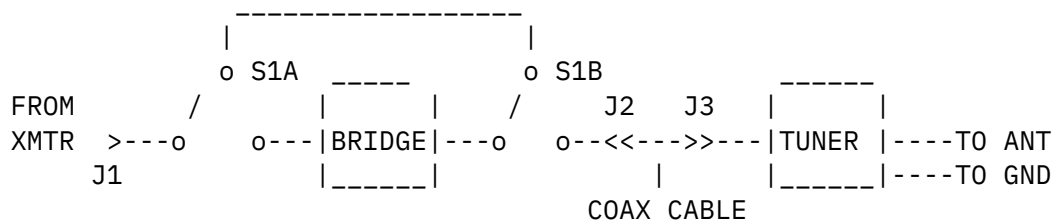


The SWR bridge IN and OUT connections are shown paired for coaxial cable connections. There is actually only one GND pin. It should be wired to the shield of the coax cable. These connections are on the left hand side of the Rainbow PC board.



The tuner connections are located on the right-hand side of the pc board. There are separate GND pins for both sides of the tuner. Actually the "50 OHMS" and "GND" pins shown here on the left and located at the upper right of the pc board are mis-labelled (on the pc board, that is). The one that is marked "50 OHMS" is actually GND and vice versa. The ANT and GND pins are marked correctly.

The GND connections on the pc board are completely separate between the SWR bridge and tuner sections since carrying through the ground on the board would have meant a more sophisticated (expensive) printed circuit board. Since the connection must be done externally, it is recommended that coaxial cable be used to make sure of a good 50 ohm shielded connection.

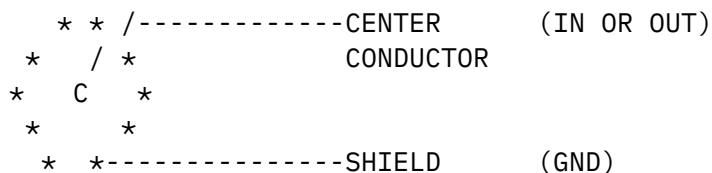


Switch S1 is used to switch the SWR bridge in-line when the tuner is being adjusted or to bypass it after tuneup. The bridge has a 6 dB loss, so you probably don't want it in-line except while you are checking SWR. The SWR bridge GND pin is connected to the shield of both connectors J1 and J2. As mentioned above, the connection between bridge and tuner should be made with coax cable. The coax cable **can** be hardwired (eliminating connectors J2 and J3) if you **never** want to use either the bridge or the tuner separately.

Strictly speaking, switch S1 is not really necessary. My prototype Rainbow used connectors J1, J2 and J3 without the switch. To put the bridge in-line, I connected the xmtr cable to J1 and ran a jumper coax connector from J2 to J3. After tuneup, I disconnected the coax jumper from J3 and ran the xmtr coax in its place.

Coaxial connectors can be any convenient type. If the Rainbow is mounted in an Altoids tin or other small container, RCA phono jacks are an inexpensive choice. If you have them available, SMA connectors are even smaller. If size is no object, BNC type connectors are a very good way to go. And if no attempt at miniaturization is made and commonality with other ham gear is important, the ubiquitous SO-239 "UHF" connector can be used.

Connections to any of the coax connectors mentioned are generally as in this figure.



Hope this helps!

72/73,

Joe E., N2CX

from Southern New Jersey, y'all

work: jeverhart@cayman.vf.mmc.com
home: n2cx@voicenet.com

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: RobCap@aol.com
Subject: [17867] Semiconductor Cross References
Message-ID: <970420153641_-1133844789@emout04.mail.aol.com>

Hi Folks:

There is a valuable site on the world wide web that I rarely see among ham radio links. It's the home page for the NTE, and the site offers a complimentary semiconductor cross reference search engine. The site has been invaluable for me when I've been troubleshooting older radio gear, like the Heathkit HW8 and HW9.

Be sure to add it to your favorite places and to your list of ham radio links.

NTE Home Page: <http://www.nteinc.com/>

Have fun.

73,

Rob, W3DX

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: RobCap@aol.com
Subject: [17856] Source for HW-8 Handbooks
Message-ID: <970420133223_-1936335822@emout09.mail.aol.com>

For those who have inquired about the source for HW-8 Handbooks, here is the contact information for Michael Bryce:

73357.222@CompuServe.COM
Mike Bryce
P.O. Box 508
Massillon, Ohio 44648

73,

Rob, W3DX

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Stew Whitehouse <STEW_W@compuserve.com>

Subject: [17841] TEK Scope
Message-ID: <199704200901_MC2-149C-4439@compuserve.com>

Hi folks,
Classified in local paper lists Tektronix
type RM545B dual trace, \$99 obo. This
was mainstay around the shops when
I was in the Navy. Probably cost the Govt.
several \$K. What questions should I ask.
and what should I look for on the scope
before pulling out my wallet? I know, I know
I will need a truck.

72/73 Stew ke4yh
Dunedin, Florida

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [17828] Ten Tec pwr supply
Message-ID: <Pine.SUN.3.91.970419220008.18767D-100000@kitsune.swcp.com>

I lost the info on who was interested in the T.T model 250 pwr supply. I
still have the supply if you are interested and would trade for cash or a
qrp rig(of course!) I think you said you had a qrp rig for 40 meters
that you would turn loose! This supply is in pristine condition and will
pwr up the Argo 509 and 405 combo. 72, Tom WB5QYT

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: ed.welch@cheaha.com (ED WELCH)
Subject: [17823] Trees and Ants
Message-ID: <8D634EB.00040025A9.uuout@cheaha.com>

-> The hard shelled pecan trees that I use for the antenna support get
-> lots of caring from the Adams family as they are greatly appreciated.
-> They provide food and shelter for the squirrels, birds, and other
-> critters and shade in the summer time from the solar rays that pass
-> through the ionosphere.

Howdy Chuck, I didn't realize it was your pecan-antenna that was
spoken of. Tell me, have you rigged your rotor up yet? I'm having
some minor problems with mine.

72/73

Ed Welch KF4KRV

NorCal Member #???

1st Grand Poobah ScQRPion of Alabama

QRP-L #873 - FISTS #2964

Luverne, Alabama

Crenshaw County - Grid EM61

```

+-----+
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+
```

> Isn't "time" a 4-letter word? <

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: George Gingell <k3tks@u1.abs.net>

Subject: [17810] RE: CRYSTAL GROUP BUY

Message-ID: <Pine.BSI.3.93.970419205037.4980A-100000@u1.abs.net>

Hi Frank,

Frank Wrote:

Wouldn't it be cheaper to build a VFO ...!?

It might, but that would not be "Authetic" for those who might want to

use them (The Crystals) in their "Vintage Novice Bottle Baby"

(QRP Valve Transmitter). Then of Course there are a few of us who

Collect Quartz :^)

72 es

QRP DX TU (C) 1986 G.Danny Gingell, K3TKS@.abs.net

Maryland Milliwatt QRP Reference Library, (301)572-6789

XYL from Shipley, Yorks, UK

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: Bernie Doechner <bad@uhf.wireless.net>

Subject: [17819] RE: CRYSTAL GROUP BUY

Message-ID: <Pine.BSF.3.95.970419224406.15790A-100000@uhf.wdc.net>

> Hi Frank,

>

> Frank Wrote:

>

> Wouldn't it be cheaper to build a VFO ...!?

>

> It might, but that would not be "Authetic" for those who might want to

>

> use them (The Crystals) in their "Vintage Novice Bottle Baby"

>

> (QRP Valve Transmitter). Then of Course there are a few of us who

>

> Collect Quartz :^)

Also, keep in mind that crystal oscillators and VXO's are a lot more stable than many VFO's and take up a LOT less PCB real estate. Some of us are miniaturization freeks.

73

Bernie nu1s

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: Walter Dufrain <dufrain@mail.gte.net>

Subject: [17821] Re: CRYSTAL GROUP BUY

Message-ID: <33598986.3DA1@mail.gte.net>

Bernie Doehner wrote:

>

> > Hi Frank,

> >

> > Frank Wrote:

> >

> > Wouldn't it be cheaper to build a VFO ...!?

> >

> > It might, but that would not be "Authetic" for those who might want to

> >

> > use them (The Crystals) in their "Vintage Novice Bottle Baby"

> >

> > (QRP Valve Transmitter). Then of Course there are a few of us who

> >

> > Collect Quartz :^)

>
> Also, keep in mind that crystal oscillators and VXO's are a lot more
> stable than many VFO's and take up a LOT less PCB real estate. Some of us
> are miniaturization freeks.
>
> 73
>
> Bernie nu1s

Yea, Bernie, and I have found that a vxo is a lot more stable in
the car (mobile QRP) because of the excessive temperatures that
the rigs are exposed to in winter and summer.....running 2 watts
mobile is tricky enough HI

Happy building de Walter AG5P
ARCI 8452 St Louis QRP Society CQC 337 NorCal 1381 QRP-L
CW Ops Australia 455 NE QRP 359

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: [17825] Re: Enamel remover for wire??
Message-ID: <19970420033436.AAC13972@LOCALNAME>

At 09:32 PM 4/19/97 +0000, you wrote:
>This has been beat around before I'm sure. But what is the best solvent
>for getting the enamel off my toroid coil wire ends? I should also ask
>what is readily available because the correct and best stuff is not always
>available locally.

>
>I have scraped it off.....cautiously....but I know that is not the way it
>should be done.

>
>Thanks for the help.

>
>
>73 / 72 QRP ARCI # 8911
>Gary - W2UX QRP-L # 593
>Lexington, SC CQC #413
>(EX: WA2UAX)
>CW is the REAL THING! Use it or lose it.

>
>
>General Cement (GC Electronics) makes a chemical called "STRIP-X". Catalog
Nr. 10-2602. It works on most enamels used on magnet wire. There are a few
that it does not touch! I have had very good luck stripping "Litz" wire
with it. (I use 15/44 Litz at times.) Only stuff I've found worth a damn

73,
E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes
Butternut HF2V antenna, G-R test gear.....*

```
On 19-Apr-97 Gary M - W2UX expounded:
>This has been beat around before I'm sure.  But what is the best solvent
>for getting the enamel off my toroid coil wire ends?  I should also ask
>what is readily available because the correct and best stuff is not always
>available locally.
>
>I have scraped it off....cautiously....but I know that is not the way it
>should be done.
>
>Thanks for the help.
>>
```

Sent at 00:23:33 on 20-Apr-97

John L. Sielke n4js@amsat.org n4js@pobox.com
n4js@n4js.ampr.org NJ Grid:FM29LN
<http://www.pobox.com/~n4js>
NJ-QRP #57 QRP-L #884 QRP-ARCI #9328
NE-QRP #507 G-QRP #9544 NorCal QCWA FISTS #2781
WIMPS Qs=011 30m=11 17m=0 12m=0 States=03/00/00 Countries=08/00/00

From owner-grp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Joe Everhart <n2cx@voicenet.com>
Subject: [17843] Re: Enamel remover for wire??

Message-ID: <199704201419.KAA29767@mail3.voicenet.com>

Fellow homebrewers/builders,

When you consider stripping magnet wire, be sure what kind of insulation is used. The older magnet wires were generally used in applications that required a hard high-temperature enamel that *did* take physical abrasion or a chemical solvent to remove.

However these days much of the wire used for electronic applications has a plastic type insulation that does not require all that work to remove. They are *intended* to have insulation that is heat-strippable. This means that the heat of a soldering iron is enough to remove the insulation. In industry the ends of the wire are dipped into a solder pot to do this. At home just use your soldering iron. Because you are removing insulation, you have to hold the iron on the wire *much* longer than if you were simply tinning it. And feed lots of solder to the iron's tip. I understand that it is actually the hot flux from the solder that melts thru the insulation.

There are various names for it depending on the manufacturer, but many have the "word" *sol* in them. And if you are unsure of the heat-strippable nature of the wire you are using, check it out.

How do you tell if your wire is this kind? The wire in question is "magnet" wire so it all looks like it has an enamelled outer coating. If it is dark brown (as is the case on older Litz wire) it probably will not be the heat-strip kind. If it is amber (well not yellow type amber, kind of a coppery amber) it may or may not be heat-resistant enamel. But if the "enamel" is green or red or violet or blue, it is a pretty good bet that you have wire insulated with heat-strip insulation so try it out.

What do I use for enamel removal on non-heat-strip wire? I usually use sandpaper!

BTW, when NJQRP made up the Rainbow Tuner kits we made darned sure that we provided heat-strip magnet wire. Trying to abrade the insulation off toroid taps and tin the wires would have been a very challenging task! As an object lesson, I demonstrated winding the 35 turn, 4 tap Rainbow toroid at an NJQRP meeting. Working at a (suitably protected) dining room table, it took about 10 minutes to come up with a coil with all the wires dressed properly, taps in the right place and all leads tinned. Without taps it would have been less than half that time. But with hard enamel insulation I would not have attempted it in public, at least not in polite

company. :-)

72/73,

Joe E., N2CX

from Southern New Jersey, y'all

work: jeverhart@cayman.vf.mmc.com

home: n2cx@voicenet.com

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: "Bob Follett" <bfollett@ditell.com>

Subject: [17873] RE: FDIM -- Latest Registration List

Message-ID: <199704202030.0AA18724@mars.ditell.com>

Gang:

We are now up to 107 FDIM Attendees! I am still accepting registration deposits, but this week, we will place our final order for our give-away book of this year. Thus, registrations received beyond Tuesday, April 22nd, will not receive this book.

The proceedings, however, will be printed in sufficient number to ensure everyone, including walk-in registrations, will receive their copy. The same is true for Lunch.

Since Preston receives badge information from me, I will cut-off my last posting to him, and to the QRP-L list on May 9th, the Friday before FDIM. Any registrations received after that date will not receive a pre-printed badge. Again, registration, at the same price, will be accepted at the door, 7am or later.

In all cases, if you haven't registered, and are currently planning to attend, please let me know so I can give the Days Inn a more accurate count for setting up.

LAST FIRST CALL

Adams	Chuck	K5FO	
Albert	Ted	KF8EE	
Antczak	Ernie		NC8N
Bachmann	Richard	N3SLR	
Beedlow	Peter	NN9K	
Benson	Dave	NN1G	
Bertuzzo	Serge	VA3SB	
Bornstein	Steve	K8IDN	
Bowman	Bob	AA5VS	
Brown	Dave		K8AX
Butler	Ralph	K6ZAN	
Butler	Ray	WA4KEJ	
Carr	Mike	WA1QAA	
Carver	Bill	W7AAZ	
Cavcey	Ken	W0YOR	
Corbin	Robin		NI9R
Corbin	Lowell	W8IQB	
Cumming	John	VE3JC	
Diana	Gary	N2JGU	
Dobbs	George	G3RJV	
Douglas	Preston	WJ2V	
Doyle	Ron	N8VAR	
Doyle	Don	AC5II	
Durbin	Ken	K8CQ0	
Eilers	Michael	AC4XS	
Evans	Ken	W4DU	
Evans	John	N3Q00	
Everhart	Joe	N2CX	
Fields	Tom	WB9VTY	
Firlik	Don	K8AQZ	
Firth	Graham	G3MFJ	
Fishpool	Tony	G4WIF	
Fitton	Jim	W1FMR	
Follett	Bob	AB7ST	
Foote	John	KR4GL	
Frisz	Tom	N9DD	
Gaffney	Bernard	N8PVZ	
Gobrick	Bob	N0EB	
Goemans	Paul	WA9PWP	
Greer	Jeffrey	WD4ETO	
Hartley	Charles	KM3V	
Henshaw	Jerry	KR5L	
Heron	George	N2APB	
Himes	Martin	WB8FNH	
Hintz	Gus	W2ZHA	
Jivoiin	Gregory	WD8JTN	
Johney	Gary	N3BYN	
Johnson	Harold	W4ZCB	

Johnston	Ray	WA2YGY
Juch	Fred	N5JX0
Karty	Steven	N5SK
Kellogg	Bob	AE4IC
Kellogg	Ellen	A1XYL
Kelsey	Bill	N8ET
Kohl	Hank	K8DD
Lewallen	Roy	W7EL
Lifland	Tom	W2RFU
Ludinsky	Chuck	K1CL
Lynch	Martin	KA1LXG
Manuel	Ed	N5EM
Massena	Fred	KG80K
Matheson	Hugh	K0QD
Meier	Pete	WK8S
Midkiff	Monte	N7TAU
Mikuckis	Joe	K3CHP
Mitchell	Brad	WB8YGG
Moizeau	Charles	W2SH
Moriarity	John	K6QQ
Moyle	Al	N3KFL
Muscolino	Bruce	W6TOY/3
Owen	James	K4CGY
Parfitt	Dale	W40P
Passione	Vince	WA2ECP
Perry	Mike	PA3ASC
Powers	David	KB8RVS
Puckett	Dan	WD8AAU
Quick	Paulette	WB9VHF
Rea	Al	W8LRM
Reed	Wayne	K9NE
Rees	Chris	G3TUX
Reid	Glen	K5HGB
Roberts	Ken	VE3BGW
Schill	Bob	N9ZZ
Scott	James	W9KV
Shearer	Sam	WB5ZJN
Shilhanek	Terence	W0PFR
Simon	Ed	K04CO
Specht	Philip	K4PQC
Stafford	Jim	W4Q0
Stark	Ron	KU7Y
Steyaert	Roger	K7RXV
Switzer	Buck	N8CQA
Szakonyi	Dick	KA3ZOW
Szakonyi	Kathy	N3SAD
Tankersley	John	WD9EFN
Tanton	Ed	N4XY

Todd	Ron	K4WZ
Touth	Len	W8VQ
Tracy	Dan	KC9RH
White	Bob	W03B
Whitehead	Ellis	AA8SR
Windish	Walt	KB2JE
Winkler	Dan	N7IVR
Wohlschlag	Dick	WA9FLX
Younce	Jim	K4ZM
Young	Terry	K4KJP
Young	Paul	KC2AHB

If you have any corrections on spelling or callsigns, please E-mail me

73, Bob, FDIM Registration Chair

 Bob Follett AB7ST, QRP-L # 129, NorCal, ARCI, 10-10, ARS
 2861 Estates Dr. VOICE: 801.649.6457
 Park City, UT 84060 E-mail: bfollett@ditell.com

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
 From: Bernie Doehner <bad@uhf.wireless.net>
 Subject: [17849] Re: IS the days of Micropower limited ?
 Message-ID: <Pine.BSF.3.95.970420105736.17480A-100000@uhf.wdc.net>

> RE: Some Scary facts

>

> Bernie nu1s (bad@uhf.wireless.net) has rasied some serious questions
 > for amateur radio in general and particularity low-power or weak
 > signal amateur communications of the future.

>

> First I do not claim to have any answers or even fully understand the
 > technology. I do however have many questions. After reading the

To be honest, I don't understand the technology 100% either, but it has me
 "hooked" that's for sure.

> various postings (RE:Some scary facts) I went back to the text books. I
 > had always considered spread spectrum a solution to crowding. I had not

Yes/no. Even on purely SS systems (no narrowband users), the capacity
 limit is governed by the minimum SNR you can live with, and on
 crowded SS bands, the different users with different PN codes will also
 raise each other's noise floor, to some extent (but there are certain

codes, like Gold codes that will reduce this problem because their crosscorrelation is low). Still usually you can support more users in an SS system than a frequency division multiple access system (which has a hard limit based on the number of simultaneous frequencies/channels).

> considered the possible costs to those who did not operate in that mode.
> At present we enjoy many different modes within a given band width.
> SSB,CW, digital, FM, and even AM. A station operating any of these
> modes via a band plan do not cause me any interference if I operate in
> my chosen mode. (i.e. SSB on 7.2 mhz has no effect on 7.040 mhz CW
> operation, etc.)

Unless you happen to live in California and are operating in the VHF/UHF bands. (sorry, couldn't resist).

> The same can not be stated for spread spectrum operation. Ref: ARRL
> handbook It states "the filtered spread spectrum signal is apparent
> only as a +10 db hump in the noise floor." They even include a graph.

Hmm. Hadn't payed close enough attention to that in the past. I assume they are feeding the spread spectrum signal straight back into spectrum analyzer without any path loss.

10 dB over the noise floor gets eaten up fairly quickly in path loss at 440 Mhz. (even LOS). Now, that brings up an interesting point. Maybe spread spectrum should be allowed in all ham bands, but ONLY at a maximum of 1W (and with a minimum chip rate) to ensure that the spread energy density is low enough to be negligible to the narrow band user.

You see. It's not sufficient to say, gee the signal is 10 dB above the noise floor. It is for this particular system, but if the chip rate is increased, the output power is distributed over a much greater bandwidth and less energy will make it into your narrowband receiver.

I don't really know anyone who is experimenting with SS in the ham bands who wouldn't happily comply with a 1-10W power limit. As stated in the handbook, one advantage of spread spectrum (direct sequence), is copying signals below the noise. No need to crank up the power if you are using a mode that has better receive sensitivity than other (narrowband modes).

> Question 1 : What happens to the micropowered CW signal that looks like
> a 0.1 uVolt input to my receiver when the noise increases
> by 1 1/2 S units? Now that is a big hump

Depends on a lot more factors. If the above factors are implemented as rules, you'll need a very large number of SS users to be even detectable. Do to the chaotic nature of frequency/power coordination in the ham bands,

I don't even know how to begin doing a proper analysis, although I have a paper from Costas that does a great job at this (using statistics).

> Question 2 : Power control - Initially it is great, those QRO stations
> are going to be reduced in power. Maybe ? Power control

Well yes/no. It means that the "use the minimum power to sustain reliable communications rule" is required to be implemented in hardware. Without additional power limits, there could still be a 1KW amplifier in the loop, but with AGC control from the power control mechanism. There currently is a 100W power limit rule for SS in 420 MHz. and above. I don't see that power limit being increased any time soon. On the same token, I think it might be a good idea to reduce the power limit to at least 10W (at least below 50 MHz.).

I looked at this power control issue a bit in the early phases of my 50 Mhz. Frequency Hopping system (still under construction). For a point to point link with only two stations, automatic power control is quite manageable, but add more stations and varying band conditions in the loop and you have a mess that can only be controlled with a microcontroller, programmed to respond to conditions.

Wouldn't it just be a LOT easier to just force all SS signals (say below 50 MHz. - if that ever happens) to have less than 1W power output and a minimum spread bandwidth?

> says that I am not getting a good signal therefore the
> path needs more signal therefore my QRP signal must be
> QRO. The station next to me needs more signal, again
> increase the power. What happen to micropower signals ?

Hey. I hadn't even thought of it that way, but it's not unlike the scenario we have right now, with 1KW stations jumping on top of a QRP qso. I'd have to argue that most 1KW stations have a way to vary their power continuously - but do they choose to? If there is a rare (say R4) call only 200 Hz. from your QRP CW ragchew, do you think most 1KW operators will care about the interference they'll cause to you?

That's why I really like operating on 30 Meters. If it were up to me, I'd make the power limit for the entire band 10W. I have never needed more than 10W on 30 Meters. Now, if there was an SSB segment (also with the same 300W power limit as we have on 30/CW), I'd be in heaven :)

Now, stop me, before I really get on by soapbox!

> Bernie suggested discussion about the impact. He is correct we do
> need both discussion and facts. Not about SS interferece with SS, but
> what happens to SSB, CW, etc. if the bands go SS.

Thanks for getting the ball rolling!

And again, power limiting SS to say 1W and a minimum spread bandwidth is only one possible answer. It could also say, you are only allowed to use frequency hopping as long as you don't hop onto a protected band segment, or use a DSSS signal with low enough of a chipping rate (spread bandwidth) to not interfere with a protect subband - BUT this in turn means that to users in the unprotected bandwidth the power density and hence the interference will be higher.

> I do not have the answers but would like to see the questions answered
> by the ARRL, FCC, experts, etc.

Me too - and I think we'll see that what happens to the current spread spectrum NPRM (comments due May 5) before the FCC.

> Will micropower stations be a thing of the past ?

I certainly hope not, and proper power/spreading rules can help reduce the impact to narrowband micropower stations.

Anyone else?

73

Bernie nu1s

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: pmeier <pmeier@tir.com>
Subject: [17876] RE: Items SOLD
Message-ID: <199704202111.RAA18902@tir.com>

All items have been spoken for EXCEPT the TS-50

St. Louis Tuner - SOLD!

Wilderness Sierra - SOLD!

Outbacker Perth - SOLD!

Kenwood TS50 - covers all bands/modes w/general coverage receiver. Does not have CW filter. Set to power levels of 5/10/100 watts . Manual and original box. Has new front face plate. Looks and works excellent.

Price is \$710

Price includes shipping but add \$5 for C.O.D. unless prepaid

Pete WK8S

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: ekscott@ibm.net
Subject: [17870] Re: Ladder Line Standoffs and other Antenna Tidbits
Message-ID: <335A667F.92D@ibm.net>

James R. Duffey wrote:

> You may wish to curve the PVC end to match the mast, depending on
> the diameter of the mast.

A real good way to "notch" tube of any type is a hole saw that's the same size as the piece you wish to butt it up to. I have used fancy tube notching jigs in the past to make up roll cages and the like but if it's just going to be a 90 degree joint, a careful job with a drill or drill press should be sufficient.>>>Erin

Erin Scott KK7GE
ekscott@ibm.net
KK7GE@N7UVH.#NID.ID.USA.NOAM

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: "William Nicolson Jr." <aa2yh@erols.com>
Subject: [17813] re:ldg group buy
Message-ID: <335A1F75.1CE0@erols.com>

Hi Scott, Tuner arrived on Fri, I'm sure everyone who was a part of the group buy appreciates the great job you did!!!

Thanks es 73 de
Bill Nicolson AA2YH

--

* William F Nicolson Jr. AA2YH Colonia, NJ Fn20 QRV 80-10/2/440 *
** OHR-400 ** LDG qrp tuner ** Island keyer ** Schurr Paddles ***
* QRP-L #955 * FISTS #2016 * NJQRP #68 * Tri-County Radio Assoc *
** W9INN 80 - 10m Dipole ***** TA-33 Tribander 20 - 10m **
*** 908-381-1386 h ** 908-722-6000 x2409 w ** aa2yh@erols.com ***

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Steve Hideg <Steve.Hideg.1@nd.edu>
Subject: [17833] Re: Little Red Key
Message-ID: <v03020901af7f5e7313f6@[129.74.35.26]>

At 5:36 PM -0400 4/19/97, Robert D. Haslach wrote:

>I have a nye straight key - m yfirst and steady friend - and an MFJ
>iambic paddle for my Scout 555 and now the Little Red Key from G. Kost.
>(dba the American Radio QRPKEY Mfg Co). When you see George at Dayton or
>any hamfest, stop and chat and buy a key. Sweet little things! and very
>well engineered. I saw him at Timonium a few weeks ago and eagerly did
>both. Nice man, tolerant XYL, and good value product. I am waiting for
>his new paddle, which he is developing while sitting in his lawn chair at
>various hamfests.
>The key has a nice form profile, good weight, good tension springs and
>firm settings. I have glued it to my ARK-40 and will try it with my Scout
>next time I'm mobile.
>Just a little promotion of a nice guy and nice product.

It would have been nice if he used a finer threaded adjustment screw.

You can see pictures of these little red keys in the QRP Equipment Catalog
section of the Internet QRP Club web site <<http://qrp.cc.nd.edu/qrp-l/>>

The page with the keys is at:

<<http://qrp.cc.nd.edu/qrp-l/catalog/qrpkey/keys.html>>

--Steve

Steve Hideg, N8HSC/9 QRP-L #136
Check out the Internet QRP Club's site on the WorldWide Web:
<<http://qrp.cc.nd.edu/QRP-L/>>

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: George Gingell <k3tks@u1.abs.net>
Subject: [17808] Re: Micronauts and ?Q#RP Calls
Message-ID: <Pine.BSI.3.93.970419193455.3279A-100000@u1.abs.net>

I Don't have the Original article handy, however I have the March 1997
issue of CQ, The Dave Ingram Column pages 74,75, and 76 Describe the

Micronaut II. The original was from his (April?) column last year.

You can order a Micronaut II Transmitter kit from Dave Ingram, K4TWJ, 4941 Scenic View Drive, Birmingham, AL 35210

The kit is \$15 plus shipping (\$2 regular mail, \$3.50 priority mail). Specify if you want an 80 meter (3.58 MHz crystal included), 40 meter, or 30 meter version (you add a crystal for your desired frequency).

Steve Bornstein , K8IDN of the Columbus QRP Club has designed a Companion Receiver which they (CQrp) sell for \$18. Contact Steve at <saborns@freenet.columbus.oh.us> for details.

72 es Happy Milliwatting to you,
QRP DX TU (C) 1986 G.Danny Gingell, K3TKS@abs.net
Maryland Milliwatt QRP Reference Library, (301)572-6789

On Sat, 19 Apr 1997, Kirk Staats wrote:

> At 03:06 AM 4/19/97 +0000, you wrote:
> >Hi Paul and fellow Knights, (KL Net Members)
> >
> >The Micronaut Transmitter Appeared in CQ magazine this past year.
> >There is a new version out now in care of K4TWJ, Dave Ingram.
> >I think he is offering a kit.
>
> How do I get a kit?
>
> Kirk
> W3AW
> Canton, Oh
>

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Bernie Doehner <bad@uhf.wireless.net>
Subject: [17857] Re: newgroups- radio?
Message-ID: <Pine.BSF.3.95.970420133834.18235A-100000@uhf.wdc.net>

On Sun, 20 Apr 1997, pmeier wrote:

> Any know the name of the ham radio swap newsgroup? Can't seem to find it.
>

> Pete WK8S

rec.radio.swap

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: k5vp@earthlink.net (The Potters of Santa Paula)
Subject: [17859] Re: newgroups- radio?
Message-ID: <v01540b00af80140ac46e@[206.250.92.70]>

>Any know the name of the ham radio swap newsgroup? Can't seem to find it.

>

>Pete WK8S

Hi Pete-

Try:

rec.radio.swap

Also, of interest:

rec.radio.amateur.misc

rec.radio.amateur.policy

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Ed Tanton <n4xy@bellsouth.net>
Subject: [17830] Re: non-corrosive "silicone-type" adhesive
Message-ID: <3.0.1.32.19970420012003.00a1c3b0@mail.atl.bellsouth.net>

I can't believe this... and you an autoparts dealer!!! There is a silicone sealer by Permatex Form-A-Gasket that specifically says it *** will not damage sensitive oxygen sensors***. I think it's something like Permatex Form-A-Gasket Blue-Gold. They actually sell two non-damaging products but get the better one. It won't hurt anything. I have BOTH the GE non-corrosive RTV and this and it works.

ANY RTV/etc. that smells strongly of acetic acid will ruin any metal its fumes can reach. There are some people claiming to put it on outdoor connectors and cables. I would suggest they turn their lights back on. In ~ 1981 I used some regular Silastic on a Newtronics 4BTV antenna, where the

RG-8 was connected to the insulated center conductor of the antenna. 4 inches away was the coax shield connection to the grounded frame of the antenna. I covered everything, figuring that, since it was outdoors, it would cure OK. BIG MISTAKE. It took about 4 days for the coax SWR to reach infinity... and what I had was a dead short between the shield and the center conductor. I removed all the RTV and whatever corrosion I could find (no easy job), cut a foot off the RG-8 saw bright copper again (the other end of the now-removed foot long piece was a very nice shade of copper oxide.)

Same day I used it as a strain relief on a quarter inch phone plug using audio cable that was much smaller than the large hole at the back of the plastic plug body. The next time I tried to use the speaker the cable and plug were on, I had no audio. I eventually found that just the fumes from a small dab at ~ 2 inches or so from the insulated center conductor of the plug had sufficiently corroded the jack's metal that it was a dead short to the frame! Remember THAT it was a closed space inside the plug.

I have NEVER used it within several feet of anything oxidizable ever since-and tend to rant on the subject. Before Permatex came out with this, you had to buy from the likes of Newark or Allied... with minimum orders, and mucho \$\$\$ per tube (\$12-\$15). I bought 6 tubes at once a long time ago, put the other 5 in the freezer, and only thawed one out when I either ran out, or it quit curing.

I would suggest you write right on the tube with a Sharpie permanent marker the date when you open this any of stuff, and throw it away w/in 3 months, and certainly w/in 6. At about \$4 / tube retail, that's not too bad. DON'T get it on your fingers and then in your eye. It may not smell as bad, but it's just as bad for something sensitive like an eye-maybe more-until after it's cured, when for all intents and purposes, it is inert.

One final comment or two. I have also used Goop. It also works OK around electronic stuff. The basic difference between the three is curing.

1. Regular Silastic RTV absorbs the moisture in the air as a curing agent. It exudes acetic acid as a byproduct. Hence the corrosiveness.
2. Electronics safe stuff uses a much milder reaction, typically takes longer, and is not as physically strong an adhesive. It also uses the water vapor in the air but the byproduct(s) it exudes are non-corrosive.
3. Now we come to Goop. It is a bit more involved since it uses a fairly strong hydrocarbon solvent that evaporates to cure. But that solvent-while dangerous to your eyes-or POSSIBLY surrounding plastics-is not particularly corrosive to copper/etc. So you CAN use it-but don't. For two reasons: a] I do not know it is non-corrosive to any/every sensitive metal. It has been OK around copper, aluminum and steel; b] It shrinks! Only a little, but the stuff-just like most solvent-curing adhesives loses that solvent as it

72, Mark N2VPK
Member of the Buffalo QRP Connection

On Sun, 20 Apr 1997, Allen Jones wrote:

> I'm just about to the alignment stage with the OHR 100 (40M) that I've been
> working on. The manual states that a scope *must* be used for the alignment
> but I know that there are folks on this list who have had success and didn't
> use a scope. What procedure did you use?
>
> Thanks
>
> Allen Jones, W9DZ
> Michigan City, IN
> ajones@adsnet.com
>
>

From owner-qrp-l@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: ed.welch@cheaha.com (ED WELCH)
Subject: [17814] Re: open line lightning protection
Message-ID: <8D634AC.000400259B.uuout@cheaha.com>

-> : I guess my question really is.....Will spark pluge really protect
-> the : solid state rigs??
->
-> Methinks Ron already knows the answer. Stop looking for the spark
-> plugs right now, they will only provide you with a false sense of
-> protection. The idea with the spark gaps was to limit the static
-> build up to a couple thousand

Interesting, but at the hamfest in Birmingham, AL today I was looking
through some of "The Wireman"'s stuff and there was actually one of
these "static-discharge" devices ready for sale to the public. I
didn't check it out real close, but if any of you go to a hamfest where
The Wireman is take a peek at it.

72/73
Ed Welch KF4KRV
NorCal Member #???
1st Grand Poobah ScQRPion of Alabama
QRP-L #873 - FISTS #2964
Luverne, Alabama
Crenshaw County - Grid EM61

+-----+

-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----
+-----+

> Isn't "time" a 4-letter word? <

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: wd4et@juno.com
Subject: [17845] Re: Sierra Mods
Message-ID: <19970420.110535.4654.1.wd4et@juno.com>

Now that the tuning knob has been modified with lead, a hazardous material, the following label should be permanently affixed to the rear of the cabinet.

"This product contains hazardous material. It should be disposed of properly. Send this product, along with a \$10 handling fee, to Jeff, WD4ET for proper decontamination and recycling."

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: Ed Tanton <n4xy@bellsouth.net>
Subject: [17848] Re: Sierra Mods
Message-ID: <3.0.1.32.19970420115022.00981380@mail.atl.bellsouth.net>

At 10:48 AM 4/20/97 EST, wd4et@juno.com wrote:
>Now that the tuning knob has been modified with lead, a hazardous
>material, the following label should be permanently affixed to the rear
>of the cabinet.
>
>"This product contains hazardous material. It should be disposed of
>properly. Send this product, along with a \$10 handling fee, to Jeff,
>WD4ET for proper decontamination and recycling."
>

Nice try Jeff!!!!!!!!!!!!!!!!!!!!
72/73

Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX

QRP-ARCI #7663 G-QRP #6779 OK-QRP #172 QRP-L #758
AdvRC #140 NORCAL #1779 NCDXF SEDXC

Life Member: ARRL AMSAT INDEXA QCWA

INTERESTS: DX QRP BoatAnchors Test Equipment Photography
CW: 99.9% QRP: 95-100% (Mood swings!)

~~~~~  
"Think you can, think you can't: either way you're right!"       Henry Ford  
~~~~~

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: dzn1@juno.com (Howard D Rubin)
Subject: [17844] Re: TEK Scope
Message-ID: <19970420.092243.6830.0.dzn1@juno.com>

Stew,

I would ask whether it works and if you could make some measurements with it. Also what will come with the scope, for example, plug-ins, manuals, probes, spare tubes, records of calibration (very doubtful). Try and find an old catalog for Tektronix scopes and determine what plug-ins were available for the unit.

As I recall the 545 was a real lab warmer. I recall working at GE in Philadelphia and using the 545 in my early days as a test engineer. The 545 would slowly wind up to a roar and on those chilly mornings at the drafty 7th floor venue would give me 10 minutes to get a hot cup of coffee and a sweet roll before rolling out the test chores of the day. That was 27 years ago. Would I still buy and use a '545 as a lab scope? Well, yes, I would. But only if I had a vested interest in the local electric company and a moderated set of expectations on long term availability of the massively tube architecture.

I would say, go for it. At very least you'll have all the knobs, switches and RF/IF components you can use for lifetime, should you wish to disintegrate the works for other applications.

I'd be willing to bet there is a healthy power supply lurking in there which would make for the basis of a healthy kilowatt linear (opps, strike that from the QRP record, please).

Regards,
Howard Rubin, N3FEL
Penn Wireless Association
WWW.PENNWIRELESS.ORG

On Sun, 20 Apr 1997 09:02:18 -0400 Stew Whitehouse

<STEW_W@compuserve.com> writes:

>Hi folks,

>Classified in local paper lists Tektronix

>type RM545B dual trace, \$99 obo. This

>was mainstay around the shops when

>I was in the Navy. Probably cost the Govt.

>several \$K. What questions should I ask.

>and what should I look for on the scope

>before pulling out my wallet? I know, I know

>I will need a truck.

>

>72/73 Stew ke4yh

>Dunedin, Florida

>

>

>

>

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997

From: ka0yos@arn.net

Subject: [17831] Re: Trees

Message-ID: <199704200536.AAA06708@arnet.arn.net>

Brad,

We have no trees here in West Texas either! There is an honest to God historical marker documenting the first tree in the Texas panhandle (just off U.S. 60 between Amarillo and Pampa [It grew to almost 7 feet]). Two sugestions, #1 Hybrid Poplar it grows as fast or faster than Lombardi poplars is very hardy and has a more classic tree shape than the tall skinny Lombardis. It also lives longer than the Lombardi. #2 Hybrid Elm it grows very fast as well and is a harder more stable wood. The new hybrid won't get Dutch Elm disease and will out live us all. Just be sure with either of these that you prune them correctly! We want nice tall antenna supports, oops trees not giant bushes!

I have had great luck with trees from Gurney's! (Usual disclaimers) Those ones that are tough enough to get a start in South Dakota thrive when moved!! (Just kidding) They are also very affordable!

73,

Joe ka0yos

From owner-qrp-1@Lehigh.EDU Sun Apr 20 18:04:07 1997
From: ed.welch@cheaha.com (ED WELCH)
Subject: [17822] Re: Trees, need rotor...
Message-ID: <8D634D5.00040025A7.uuout@cheaha.com>

-> But, on a more serious note: We have all learned through this medium
-> that there is one who would wrap a Pecan tree with wire.
-> So...when you first learned of this, did it occur to you to wonder as
-> to whether this honored (supposedly) tree was a hard-shell Pecan or a
-> soft-shell Pecan? Did you think about the implications?
-> Well, there you go! My point exactly!

...am having a few (slight) problems installing rotor on afore mentioned
antenna.....anybody got any rather large u-bolts?

72/73

Ed Welch KF4KRV

NorCal Member #???

1st Grand Poobah ScQRPion of Alabama

QRP-L #873 - FISTS #2964

Luverne, Alabama

Crenshaw County - Grid EM61

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+-----+  
-----+ Norcal 40a es Straight Key es Wire-wrapped Trees +-----  
+-----+
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> Isn't "time" a 4-letter word? <